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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,002	05/12/2000	PATRICK DROZ	SZ9-97-009N	5755
48878	7590	11/23/2005	EXAMINER	
VAN LEEUWEN & VAN LEEUWEN			HO, CHUONG T	
P.O. BOX 90609			ART UNIT	
AUSTIN, TX 78709-0609			PAPER NUMBER	

2664

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/463,002

Applicant(s)

DROZ ET AL.

Examiner

CHUONG T. HO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,9,11,12 and 14 is/are rejected.
- 7) ☒ Claim(s) 5,10,13,15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The amendment filed 05/05/04 have been entered and made of record.
2. Applicant's arguments with respect to claims 1-2, 4-7, 9-16 have been considered but are moot in view of the new ground(s) of rejection.
3. Claims 1-2, 4-7, 9-16 are pending.

Claim Rejections - 35 USC § 112

4. Claims 1, 6, 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter "The forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with a backward direction using the swapping table" which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with a backward direction using the swapping table.
5. Claims 1, 6, 11 recite the limitation "the sending nodes" in "the sending nodes include a first label into each of the cells representing an identification of the routing of the cell; the sending nodes includes a second label into each of each of the cells representing an identification of the source of the cell". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 4, 6, 7, 9, 11, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cidon et al. (U.S. Patent No. 5,579,480) in view of Kobyasi et al. (U.S. Patent No. 6,333,932).

Regarding to claim 1, Cidon et al. discloses multipoint-to-point transmission method for sending frames of data from at least two sending nodes via one or more forwarding nodes to one receiving node in a ATM network wherein each frame of data is partitioned into cells, comprising the step of:

- The sending nodes include a first label into each of the cells representing an identification of the routing of the cell (see col. 8, lines 61-63);
- The sending nodes include a second label into each of the cell representing an identification of the source of the cell (see col. 8, lines 63-65);
- The forwarding node swaps both the first label associated with a forward direction (see col. 9, lines 65-68; col. 10, lines 21-27) and the second label associated with backward direction (see col. 10, lines 30-37) using the swapping table (see col. 9, lines 43-53).

However, Cidon et al. is silent to disclosing the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction.

Kobyasi discloses the quality and performance of the connectionless communications system (see abstract); comprising:

- the forwarding node concurrently swaps (simultaneous changes) both the first label (header) associated with a forward direction and the second label associated with backward direction (see col. 11, lines 8-11, providing the SMDS service from the specific value (for example, VPI=3F, VCI=03FF) added by the individual unit, and simultaneously changes the value of the VPI/VCI assigned to the header of the ATM cell containing the payload field input from the individual unit of the DS3-SMDS interface, etc. and the L2-PDU of the SMDS service into the value of the VPI/VCI specifying the subscriber network interface (SNI) terminating the individual unit which transmits the ATM cell).

Both Cidon and Kobayashi discloses the multipoint-to-point transmission method for sending frames of data from at least two sending nodes via one or more forwarding nodes to one receiving node in a ATM network wherein each frame of data is partitioned into cells. Kobayashi recognizes the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Cidon with the teaching of Kobayashi to concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction in order to be able to differentiate the cells of the different sources with the help of this second label.

7. Regarding to claim 2, Cidon et al. further discloses the forwarding node swaps the first and the second label according to the same swapping table (see col. 11, lines 22-26, table 3, col. 12, lines 10-54 – discloses an example of forward VC traversal using

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table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions).

8. Regarding to claim 4, Cidon et al. further discloses the swapping of the second label is carried out for the same ports of the respective forwarding nodes as for the first label (see col. 11, lines 22-26; table 3; col. 12, lines 10-54 – discloses an example of forward VC traversal using table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions so it is using the same ports).

9. Regarding to claim 6, Cidon et al. discloses an apparatus for sending frames of data in a multipoint-to-point fashion from at least two sending nodes via one or more forwarding nodes to one receiving node in an ATM network wherein each frame of data is portioned into cells, comprising:

- In the sending nodes, means for including a first label into each of the cells representing an identification of the routing of the cell (see col. 8, lines 61-63);
- In the sending nodes, means for including a second label into each of the cells representing an identification of the source of the cell (see col. 8, lines 63-65);
- In the forwarding node, means for swapping both the first label associated with a forward direction (see col. 9, lines 65-68; col. 10, lines 21-27) and the second label associated with a backward direction (see col. 10, lines 30-37) using the swapping table (see col. 9, lines 43-53) and

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- In the forwarding node, with respect to the second label, means for entering the swapping table in the column of the output labels and reading the corresponding input label (see col. 13, lines 22-30; table 3; disclosed is the reading of the input label marked Pin on the table when 2, 1023, which is an output label, is found).

However, Cidon et al. is silent to disclosing the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction.

Kobyasi discloses the quality and performance of the connectionless communications system (see abstract); comprising:

- the forwarding node concurrently swaps (simultaneous changes) both the first label (header) associated with a forward direction and the second label associated with backward direction (see col. 11, lines 8-11, providing the SMDS service from the specific value (for example, VPI=3F, VCI=03FF) added by the individual unit, and simultaneously changes the value of the VPI/VCI assigned to the header of the ATM cell containing the payload field input from the individual unit of the DS3-SMDS interface, etc. and the L2-PDU of the SMDS service into the value of the VPI/VCI specifying the subscriber network interface (SNI) terminating the individual unit which transmits the ATM cell).

Both Cidon and Kobyasi discloses the multipoint-to-point transmission method for sending frames of data from at least two sending nodes via one or more forwarding nodes to one receiving node in a ATM network wherein each frame of data is

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partitioned into cells. Kobyasi recognizes the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Cidon with the teaching of Kobyasi to concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction in order to be able to differentiate the cells of the different sources with the help of this second label.

10. Regarding to claim 7, Cidon et al. further discloses the forwarding node swaps the first and the second label according to the same swapping table (see col. 11, lines 22-26; table 3; col. 12, lines 10-54 – discloses an example of forward VC traversal using table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions).

11. Regarding to claim 9, Cidon et al. further discloses the swapping of the second label is carried out for the same ports of the respective forwarding nodes as for the first label (see col. 11, lines 22-26; table 3; col. 12, lines 10-54 – discloses an example of forwarding VC traversal using table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions so it using the same ports).

12. Regarding to claim 11, Cidon et al. discloses multipoint-to point transmission method for sending frames of data from at least two sending nodes via one or more

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forwarding nodes to one receiving node in an ATM network wherein each frame of data is partitioned into cells, comprising the step of:

- The sending nodes including a first label into each of the cells representing an identification of the routing of the cell (see col. 8, lines 61-63);
- The sending nodes include a second label into each of the cells representing an identification of the source of the cell (see col. 8, lines 63-65);
- The forwarding node swaps both the first label associated with a forwarding direction (see col. 9, lines 65-68; col. 10, lines 21-27) and the second label associated with backward direction (see col. 10, lines 30-37) using the swapping table (see col. 9, lines 43-53) and with respect to second label, the forwarding node enters the swapping table in the column of the output labels and reads the corresponding input label (see col. 13, lines 22-30; table 3; disclosed is the reading of the input label marked Pin of the table when 2, 1023, which is an output label, is found.

However, Cidon et al. is silent to disclosing the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction.

Kobyasi discloses the quality and performance of the connectionless communications system (see abstract); comprising:

- the forwarding node concurrently swaps (simultaneous changes) both the first label (header) associated with a forward direction and the second label associated with backward direction (see col. 11, lines 8-11, providing the SMDS

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service from the specific value (for example, VPI=3F, VCI=03FF) added by the individual unit, and simultaneously changes the value of the VPI/VCI assigned to the header of the ATM cell containing the payload field input from the individual unit of the DS3-SMDS interface, etc. and the L2-PDU of the SMDS service into the value of the VPI/VCI specifying the subscriber network interface (SNI) terminating the individual unit which transmits the ATM cell).

Both Cidon and Kobyasi discloses the multipoint-to-point transmission method for sending frames of data from at least two sending nodes via one or more forwarding nodes to one receiving node in a ATM network wherein each frame of data is partitioned into cells. Kobyasi recognizes the forwarding node concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Cidon with the teaching of Kobyasi to concurrently swaps both the first label associated with a forward direction and the second label associated with backward direction in order to be able to differentiate the cells of the different sources with the help of this second label.

13. Regarding to claim 12, Cidon et al. further discloses the forwarding node swaps the first and the second label according to the same swapping table (see col. 11, lines 22-26; table 3; col. 12, lines 10-54 – discloses an example of forward VC traversal using table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions).

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14. Regarding to claim 14, Cidon et al. further discloses the swapping of the second label is carried out for the same ports of the respective forwarding nodes as for the first label (see col. 11, lines 22-26; table 3; col. 12, lines 10-54 – discloses an example of forwarding VC traversal using table 3; col. 13, lines 19-25 – discloses an example of reverse VC traversal using table 3; the node is using the same table for both label swapping functions so it is using the same ports).

Allowable Subject Matter


16. Claims 5, 10, 13, 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/21/05



WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER